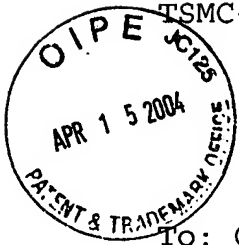


TSMC-00-488B



April 5, 2004

To: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/791,014 03/02/04

Chung-Shi Liu et al.

PREVENTION OF POST CMP DEFECTS IN  
CU/FSG PROCESS

#### INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on April 12, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

 4/12/04

U.S. Patent 6,008,120 to Lee, "Silicon Oxynitride Cap for Fluorinated Silicate Glass Film in Intermetal Dielectric Semiconductor Fabrication," teaches use of the oxynitride ARC layer as the means for keeping fluoride away from the metal used to fill a via.

U.S. Patent 6,103,601 to Lee et al., "Method and Apparatus for Improving Film Stability of Halogen-Doped Silicon Oxide Films," discloses how FSG films can be densified by hydrogen ion bombardment.

U.S. Patent 6,121,164 to Yieh et al., "Method for Forming Low Compressive Stress Fluorinated Ozone/TEOS Oxide Film," discusses reducing stress in FSG layers.

The following two U.S. Patents disclose methods to form interconnects:

- 1) U.S. Patent 6,130,157 to Liu et al., "Method to Form an Encapsulation Layer Over Copper Interconnects."
- 2) U.S. Patent 6,136,680 to Lai et al., "Methods to Improve Copper-Fluorinated Silica Glass Interconnects."

TSMC-00-488B

U.S. Patent 6,150,272 to Liu et al., "Method for Making Metal Plug Contacts and Metal Lines in an Insulating Layer by Chemical/Mechanical Polishing that Reduces Polishing-Induced Damage," discloses an organic layer over the FSG layer.

Sincerely,

A handwritten signature in black ink, appearing to read 'SBA', with a large circular flourish at the end.

Stephen B. Ackerman,  
Reg. No. 37761

Form PTO-1449

Doc No (Optional)

Application Number

TSMC-00-488

10/791,014

Applicant

Chung-Shi Liu et al.

Filing Date

03/02/04

Group Art Unit

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

## U. S. PATENT DOCUMENTS

OWNER INITIAL	DOCUMENT NUMBER	DATE	TITLE	CLASS	SUBCLASS	ALOW DATE IF APPROPRIATE
	6008120	12/28/99	Lee	438	634	12/1/98
	6103601	8/15/00	Lee et al.	438	513	6/10/99
	6121164	9/19/00	Yieh et al.	438	790	10/24/97
	6130157	10/10/00	Liu et al.	438	669	7/16/99
	6136680	10/24/00	Lai et al.	438	597	1/21/00
	6150272	11/21/00	Liu et al.	438	692	11/16/98

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
					YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Portion of Pages, Etc.)


EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.